

VEGF165/VEGFA Neutralizing Antibody



Sino Biological
Biological Solution Specialist

Catalog Number: 11066-R010

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General Information	
Immunogen:	Recombinant Human / Cynomolgus VEGF165/VEGFA protein (Catalog#11066-HNAB)
Clone ID:	R010
Ig Type:	Rabbit IgG
Applications:	ELISA(Cap),Neutralization
Specificity:	Human VEGF165/VEGFA
Formulation:	0.2 µm filtered solution in PBS
Storage:	< -20°C

Preparation

This antibody was obtained from a rabbit immunized with purified, recombinant Human / Cynomolgus VEGF165/VEGFA (rh VEGF165/VEGFA; Catalog#11066-HNAB; P15692-4; Met1-Arg191) and was produced using recombinant antibody technology.

Specificity

Human VEGF165/VEGFA

Has cross-reactivity with mouse VEGF164 (Catalog#50159-MNAB) and rat VEGF164 (Catalog#80006-RNAB) in ELISA assay

Storage

This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. **Preservative-Free.**

Sodium azide is recommended to avoid contamination (final concentration 0.05%-0.1%). It is toxic to cells and should be disposed of properly. **Avoid repeated freeze-thaw cycles.**

Background

Vascular endothelial growth factor (VEGF), also known as vascular permeability factor (VPF) and VEGF-A, is a potent mediator of both angiogenesis and vasculogenesis in the fetus and adult. It is a member of the platelet-derived growth factor (PDGF)/vascular endothelial growth factor (VEGF) family and often exists as a disulfide-linked homodimer. VEGF-A protein is a glycosylated mitogen that specifically acts on endothelial cells and has various effects, including mediating increased vascular permeability, inducing angiogenesis, vasculogenesis and endothelial cell growth, promoting cell migration, inhibiting apoptosis and tumor growth. VEGF-A protein is also a vasodilator that increases microvascular permeability, thus it was originally referred to as vascular permeability factor.

Reference

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- Cimpean AM, *et al.* (2008) Vascular endothelial growth factor A (VEGF A) as individual prognostic factor in invasive breast carcinoma. *Rom J Morphol Embryol.* 49 (3): 303-8.
- Hamdollah Zadeh MA, *et al.* (2008) VEGF-mediated elevated intracellular calcium and angiogenesis in human microvascular endothelial cells in vitro are inhibited by dominant negative TRPC6. *Microcirculation.* 15 (7): 605-14.
- Eisenach PA, *et al.* (2010) MT1-MMP regulates VEGF-A expression through a complex with VEGFR-2 and Src. *J Cell Sci.* 123 (Pt 23):4182-4193.
- Claesson-Welsh L (2010) Gremlin: vexing VEGF receptor agonist. *Blood.* 116 (18):3386-7.

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Applications

Block - In a functional ELISA which immobilized recombinant Human VEGF165 (Catalog# 11066-HNAH) at 1 µg/mL (100 µL/well) in the plate, the Rabbit anti-Human VEGF165 Monoclonal Antibody can block the binding of 5 µg/mL of biotinylated recombinant Human VEGFR2 (Catalog# 10012-H08H-B) to human VEGF165, the EC50 is 1.51 µg/mL.

Neutralization - Measured in a cell proliferation assay using human umbilical vein endothelial cells (HUVEC). The ED50 for this effect is typically 10-47 ng/mL in the presence of 10 ng/mL human VEGF165.

